Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) In a computer system, a method for generating an adapter/stub for a virtual machine during runtime, comprising:

identifying a machine state input parameter for a machine state;

identifying input parameters ~~a call to compiled code input parameter~~ for a call to compiled code;

mapping the machine state input parameter and the machine state to the ~~call to compiled code input parameter~~ input parameters for the call to compiled code; ~~and~~

mapping the machine state and return value to an exit point of an interpreter to compiled code adapter;

providing a stub representation to a compiler for compilation; and

generating object code based upon the compilation.

2.   (Canceled)

3.   (Currently Amended) A computer program product that implements an apparatus for generating an adapter/stub for a virtual machine during runtime, comprising:

computer code that identifies a machine state input parameter for a machine state;

computer code that ~~identifyies~~ identifies ~~a call to compiled code input parameter~~ input parameters for a call to compiled code;

computer code that maps the machine state input parameter and the machine state to the ~~call to compiled code input parameter~~ input parameters for the call to compiled code; ~~and~~

computer code that maps the machine state and a return value to an exit point of an interpreter to compiled code adapter; ~~and~~

computer code that provides a stub representation to a compiler for compilation; and

computer code that generates object code based upon the compilation; and

a computer readable medium that stores the computer codes.

4.   (Canceled)

5.   (Currently Amended) The computer program product of claim [[4]] 3, wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, and hard drive, and data signal embodied in a carrier wave.

6.   (Withdrawn) In a computer system, an apparatus for processing a bytecode in a runtime environment, comprising:

    means for receiving the bytecode;

    means for determining if the bytecode is to be interpreted or executed;

    if the bytecode is to be executed,

        means for determining if an adapter is required in order to process the bytecode;

        means for determining if the adapter is located in an adapter library if the adapter is required;

        means for generating the adapter if it is determined that the required adapter is not in the library;

        means for storing the generated adapter in the library;

        means for providing the adapter to the runtime environment;

        means for executing the bytecode;

    if the bytecode is to be interpreted,

        means for determining if the adapter is required; and

        means for interpreting the bytecode when the adapter is not required; and

        means for generating the adapter when the adapter is required.

7.   (Withdrawn) A computer program product that processes a bytecode in a runtime environment, comprising:

    computer code for receiving the bytecode;

    computer code for determining if the bytecode is to be interpreted or executed;

    if the bytecode is to be executed,

        computer code for determining if an adapter is required in order to process the bytecode;

        computer code for determining if the adapter is located in an adapter library if the adapter is required;

computer code for generating the adapter if it is determined that the required
adapter is not in the library;

computer code for storing the generated adapter in the library;

computer code for providing the adapter to the runtime environment;

computer code for executing the bytecode;

if the bytecode is to be interpreted,

computer code for determining if the adapter is required; and

computer code for interpreting the bytecode when the adapter is not required;

computer code for generating the adapter when the adapter is required; and

a computer readable medium that stores the computer codes.

8.   (Withdrawn) The computer program product of claim 7, wherein the computer readable
medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory,
system memory, hard drive, and data signal embodied in a carrier wave.

9.   (New) The method of claim 1, wherein the method is performed in response to a
determination that the adapter/stub is not stored in an adapter/stub library associated with the
computer system.

10.   (New) The method of claim 9, wherein the determination is performed when compiled
code is to be executed by the computer system, and the computer system determines that an
interpreter to compiled code (I/C) adapter/stub is required.

11.   (New) The method of claim 1, wherein the adapter/stub is a platform-specific interpreter
to compiled code (I/C) adapter/stub that is used to translate an execution stack used by an
interpreter into an execution stack that can be used by compiled code.

12.   (New) The method of claim 11, wherein the adapter/stub is further operable to update the
states of different components of the computer system.

13.   (New) The computer program product of claim 3, wherein the computer code is executed
in response to a determination that the adapter/stub is not stored in an adapter/stub library
associated with the computer system.

14.   (New) The computer program product of claim 13, wherein the determination is performed when compiled code is to be executed by the computer system, and the computer system determines that an interpreter to compiled code (I/C) adapter/stub is required.

15.   (New) The computer program product of claim 3, wherein the adapter/stub is a platform-specific interpreter to compiled code (I/C) adapter/stub that is used to translate an execution stack used by an interpreter into an execution stack that can be used by compiled code.

16.   (New) The computer program product of claim 15, further comprising computer program code that updates the states of different components of the computer system.